Thus $\Delta\pi(\varphi)$ is single-peaked, reaching its maximum at $\varphi = 1-\varepsilon$. Since

$$\begin{aligned}\int_0^1 [F_B(s) - F_G(s)]\, ds &= \int_0^1 [1 - F_G(s)]\, ds - \int_0^1 [1 - F_B(s)]\, ds \\ &= E_G(\hat{w}) - E_B(\hat{w}) = k \end{aligned} \tag{45}$$

$\Delta\pi(\varphi)$ approaches $k$ from above as $\varphi \to 1$. As $\varphi < 1$ for any bank with positive notional equity, there is a unique solution to $\Delta\pi(\varphi) = k$ in the range where $\Delta\pi(\varphi)$ is increasing. Therefore $\varphi^* < 1-\varepsilon$. This proves the lemma.

We can now fully solve for credit supply. The good portfolio has payoff $1-\varepsilon$ with certainty (as seen in (39)). Since the bank has zero probability of default whenever $\varphi < 1-\varepsilon$, Lemma 1 implies that the bank's probability of default is zero. From the break-even constraint of the wholesale creditors, the funding rate is therefore given by the risk-free rate. Finally, from the balance sheet identity $E+L=C$, we can solve for the bank's supply of credit as

$$C = \frac{E}{1 - \frac{1+r}{1+f}\varphi^*} \tag{46}$$

where $\varphi^*$ is the unique solution in Lemma 1.

By combining the credit supply function given above with the credit demand functions for financing working capital, we can solve for the equilibrium borrowing rate $r$ as the rate that clears the credit market. Any shock that reduces banking sector credit, such as credit losses that reduce bank equity $E$ or a delveraging episode where banks reduce leverage and lending for given equity $E$, will result in a shift upward of the credit supply curve, leading to an increase in the borrowing rate $r$. The increased borrowing rate will then kick in motion the combination of reduced productivity, reduced wages and lower offshoring activity described in Sections 2 and 3. We summarize our main result as follows.

**Proposition 2** *A reduction in banking sector credit results in (1) an increase in the borrowing rate $r$ (2) fall in output $Y$, (3) fall in productivity per worker, (4) fall in the wage $w$ and (5) fall in the offshoring activity of firms.*